Product Evaluation

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: DR-768

Effective Date: March 1, 2016
Revised: August 1, 2016
Re-evaluation Date: November 2017

Product Name: Series SI 33350 G3 and SI 33350F G3, Impact FGW Aluminum Folding Glass Wall Systems (3.5' X 9.5' Panels), Impact Resistant

Manufacturer: Solar Innovations, Inc.
31 Roberts Road
Pine Grove, PA 17963
(570) 915-1500

General Description:

System	Description	Label Rating	Design Pressure Rating
1 (5785)	Series SI 33350 G3 Impact FGW; 3.5' x 9.5' Panel; Aluminum Frame and Sash; Standard; Out-Fold Folding Glass Wall XXX/XXX	TAS 201, TAS 202, TAS 203-94 Large Missile	+70 / -70 psf
2 (5786)	Series SI 33350 G3 Impact FGW; 3.5' x 9.5' Panel; Aluminum Frame and Sash; Lite Rail; Out-Fold Folding Glass Wall XXX/XXX	TAS 201, TAS 202, TAS 203-94 Large Missile	+50 / -50 psf
3 (5757)	Series SI 33350F G3 Impact FGW; 3.5' x 9.5' Panel; Aluminum Frame and Sash; 90° Corner (No Post); Standard Sill; In-Fold Folding Glass Wall XXX/XXX	TAS 201, TAS 202, TAS 203-94 Large Missile	+80 / -80 psf
4 (5755)	Series SI 33350F G3 Impact FGW; 3.5' x 9.5' Panel; Aluminum Frame and Sash; 90° Corner (No Post); Flush Sill; In-Fold Folding Glass Wall XXX/XXX	TAS 201, TAS 202, TAS 203-94 Large Missile	+55 / -55 psf

Product Dimensions, Systems 1 and 2:

System	Overall Frame Size	Panel Size	Panel Daylight Opening Size
1, 2	260-11/16" x 118-1/2"	42" x 114"	39-1/4" x 107-1/4"

Product Dimensions, Systems 3 and 4:

System	Left Frame Size	Right Frame Size	Panel Size	Panel Daylight Opening Size
3, 4	134-1/2" x 118-1/2"	139-5/16" x 118-1/2"	42" x 114"	Panels 1-4 & 6: 35" x 107" Panel 5 (2 lites): 35" x 51-3/4"

Product Identification (Certification Agency Label on Door):

System		
1- 4	Certification Agency	NAMI
	Manufacturer's Name or Code Name	Solar Innovations, Inc.
	Product Name	System 1: SI 33350 Impact FGW 3.5 X 9.5 Panel Standard Out-Fold Aluminum Folding Glass Wall System 2: SI 33350 Impact FGW 3.5 X 9.5 Panel Lite Rail Out-Fold Aluminum Folding Glass Wall Systems 3 and 4: SI 33350F G3 Impact FGW 3.5 X 9.5 Panel 90° Corner (No Post) Aluminum Folding Glass Wall
	Test Standards	TAS 201, TAS 202, TAS 203-94 Large Missile

Impact Resistance:

System	Impact Resistant	Requirement
1- 4	Yes	These products satisfy TDI's criteria for protection from windborne debris in the Inland I and Seaward zone. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies.

Installation:

General: The assembly must be installed in accordance with the manufacturer's installation instructions and this product evaluation. Detailed drawings and installation instructions are available from the manufacturer.

Design Drawings: The aluminum folding glass wall systems must be installed in accordance with following listed drawings. The listed drawings will be referred to as the approved drawings in this evaluation report:

System	Design Drawings
1	Drawing No. 08-02652, titled "SI 33350 IMPACT FGW, 3.5 x 9.5 Panel, Standard Out-fold Aluminum", Sheets 1-9, dated March 19, 2015, signed and sealed by Luis R. Lomas, P.E., on March 20, 2015.
2	Drawing No. 08-02650, titled "SI 33350 G3 IMPACT FGW, 3.5 x 9.5 Panel, Lite Rail Out-fold Aluminum", Sheets 1-9, dated March 19, 2015, signed and sealed by Luis R. Lomas, P.E., on March 20, 2015.
3	Drawing No. 08-02638, titled "SI 33350 G3 IMPACT FGW, 3.5 x 9.5 Panel, 90º Corner (No Post) Standard Sill", Sheets 1-14, dated March 19, 2015, signed and sealed by Luis R. Lomas, P.E., on March 20, 2015.
4	Drawing No. 08-02639, titled "SI 33350 G3 IMPACT FGW, 3.5 x 9.5 Panel, 90º Corner (No Post) Flush Sill", Sheets 1-10, dated March 19, 2015, signed and sealed by Luis R. Lomas, P.E., on March 19, 2015.

Wall Framing Construction: The glass wall panel system may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum compressive strength: 3,192 psi)
- Wood dimension lumber (minimum Spruce-Pine-Fir, G≥0.42)
- Masonry (ASTM C-90, Grade N, Type 1 or greater)
- Steel (18 gauge, 33 ksi)
- Aluminum (6063-T5, 1/8" thick minimum)

Installation:

- Doors are installed in accordance with the approved drawings.
- The approved drawings indicate the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.